

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Shuichi YABUKI et al.**

Serial No.: **Not Yet Assigned**

Filed: **February 19, 2002**

For: **TERMINAL STRUCTURE OF STORAGE BATTERY**

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

February 19, 2002

Sir:

Prior to the calculation of the filing fees of the above application, please amend the application as follows:

**IN THE CLAIMS:**

Please amend the following claims as follows:

5. (Amended) The terminal structure of the storage battery according to claim 3, wherein a nut receiver and turning stopper plate portion is formed under the bolt insertion hole of said front vertical plate portion of said plate terminal by bending part of said front vertical plate portion inwards.

10. (Amended) The terminal structure of the storage battery according to claim 8, wherein teeth are further provided as the engagement portion at both side edges of said lower plate

portion of said vertical plate portion.

11. (Amended) The terminal structure of the storage battery according to claim 8, wherein the cutting is made in an H-shape in said lower plate portion under the bolt insertion hole provided in said vertical plate portion of said plate terminal, and the lower free piece is bent inwards into said engagement-fixing plate portion, while an upper free piece is bent inwards into a nut receiver and turning stopper horizontal plate portion.

12. (Amended) The terminal structure of the storage battery according to claim 1 or 2, wherein said plate terminal includes threaded cylinders which are unitarily provided in the back faces of said horizontal plate portion and said vertical plate portion at positions registering with the corresponding bolt insertion holes, respectively.

13. (Amended) The terminal structure of the storage battery according to claim 1 or 2, wherein a free plate portion is formed between right and left cuts which are provided at a lower end of said lower plate portion of said plate terminal, and a rectangular horizontal plate portion is provided as an engagement portion by bending said free plate portion inwards at a right angle.

14. (Amended) In the terminal structure of the storage battery according to claim 1 or 2, the improvement being that said bolt insertion hole is provided in a horizontal plate portion of said L-shaped led-out plate portion, that said lower plate portion is provided with the engagement portion of desired shape, that said bolt insertion hole of said plate terminal is snugly fitted on a stud bolt which is set upright on a bottom face of said notch of said cover, and that said lower

plate portion is pressed into a snug fit hole provided in said cover, so as to fix said engagement portions in engagement with opposing wall faces of said snug fit hole.

16. (Amended) The terminal structure of the storage battery according to claim 1 or 2, wherein said plate terminal has said lower plate portion pressed into said snug fit hole while being irradiated with ultrasonic waves simultaneously with application of a mechanical pressure to said plate terminal.

19. (Amended) The terminal structure of the storage battery according to claim 1 or 2, wherein the faces of said snug fit hole of said cover and said lower plate portion of said plate terminal pressed into said snug fit hole are bonded by an adhesive.

REMARKS

The above amendment is believed to place the claims in proper condition for examination.

Early and favorable action is awaited.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

In the event there are any additional fees required, please charge our Deposit Account No. 01-2340.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

The following claims have been amended as follows:

5. (Amended) The terminal structure of the storage battery according to claim 3 [or 4], wherein a nut receiver and turning stopper plate portion is formed under the bolt insertion hole of said front vertical plate portion of said plate terminal by bending part of said front vertical plate portion inwards.

10. (Amended) The terminal structure of the storage battery according to [either of claims 8 and 9] claim 8, wherein teeth are further provided as the engagement portion at both side edges of said lower plate portion of said vertical plate portion.

11. (Amended) The terminal structure of the storage battery according to [any of claims 8 through 10] claim 8, wherein the cutting is made in an H-shape in said lower plate portion under the bolt insertion hole provided in said vertical plate portion of said plate terminal, and the lower free piece is bent inwards into said engagement-fixing plate portion, while an upper free piece is bent inwards into a nut receiver and turning stopper horizontal plate portion.

12. (Amended) The terminal structure of the storage battery according to [any of claims 1 through 11] claim 1 or 2, wherein said plate terminal includes threaded cylinders which are unitarily provided in the back faces of said horizontal plate portion and said vertical plate portion at positions registering with the corresponding bolt insertion holes, respectively.

13. (Amended) The terminal structure of the storage battery according to [any of claims 1 through 12] claim 1 or 2, wherein a free plate portion is formed between right and left cuts which are provided at a lower end of said lower plate portion of said plate terminal, and a rectangular horizontal plate portion is provided as an engagement portion by bending said free plate portion inwards at a right angle.

14. (Amended) In the terminal structure of the storage battery according to [any of claims 1 through 13] claim 1 or 2, the improvement being that said bolt insertion hole is provided in a horizontal plate portion of said L-shaped led-out plate portion, that said lower plate portion is provided with the engagement portion of desired shape, that said bolt insertion hole of said plate terminal is snugly fitted on a stud bolt which is set upright on a bottom face of said notch of said cover, and that said lower plate portion is pressed into a snug fit hole provided in said cover, so as to fix said engagement portions in engagement with opposing wall faces of said snug fit hole.

16. (Amended) The terminal structure of the storage battery according to [any of claims 1 through 15] claim 1 or 2, wherein said plate terminal has said lower plate portion pressed into said snug fit hole while being irradiated with ultrasonic waves simultaneously with application of a mechanical pressure to said plate terminal.

19. (Amended) The terminal structure of the storage battery according to [any of claims 1 through 17] claim 1 or 2, wherein the faces of said snug fit hole of said cover and said lower plate portion of said plate terminal pressed into said snug fit hole are bonded by an adhesive.